



Ecompayment Merchant WEB Integration

Version 2.1
November 2019

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Fields Details

MerchantID

| Field Name | Description | MAX Length | Format | Require |
|------------|--|------------|--------------|---------|
| MerchantID | Unique Merchant identifier. Supplied by Ecompayment. | 16 | Alphanumeric | yes |

MerchantToken

| Field Name | Description | MAX Length | Format | Require |
|---------------|--------------------------|------------|--------------|---------|
| MerchantToken | Supplied by Ecompayment. | 64 | Alphanumeric | yes |

TimeStamp

| Field Name | Description | MAX Length | Format | Require |
|------------|--|------------|--------------|---------|
| TimeStamp | Milliseconds since epoch (since January 1, 1970) | 16 | Alphanumeric | yes |

MerchantTransactionID

| Field Name | Description | MAX Length | Format | Require |
|-----------------------|--|------------|--------------|---------|
| MerchantTransactionID | Internal Merchant Transaction ID. Merchant can send this transaction ID to Ecompayment system. It will be returned to merchant together with the transaction response. | 16 | Alphanumeric | no |

CardNumber

| Field Name | Description | MAX Length | Format | Require |
|------------|---------------------------------|------------|---------|---------|
| CardNumber | Primary account of credit card. | 24 | Numeric | yes |

CardEXP

| Field Name | Description | MAX Length | Format | Require |
|------------|-----------------------------|------------|---------|---------|
| CardExp | Card Expiration Date as MMY | 4 | Numeric | yes |

CardCVV

| Field Name | Description | MAX Length | Format | Require |
|------------|--|------------|---------|---------|
| CardCVV | Security number on the back of the card. | 4 | Numeric | yes |

Amount

| Field Name | Description | MAX Length | Format | Require |
|------------|---|------------|---------|---------|
| Amount | The price or amount of the product or service. Format XXXX.XX | 10 | Numeric | yes |

Currency

| Field Name | Description | MAX Length | Format | Require |
|------------|--|------------|--------------|---------|
| Currency | Indicate which type currency used for transaction. Send as 3 letters alphanumeric value. For example, for United State Dollar is USD. Please see the ISO 4217 Table at Appendix. | 3 | Alphanumeric | yes |

TransactionType

| Field Name | Description | MAX Length | Format | Require |
|-----------------|--|------------|--------------|---------|
| TransactionType | Indicate type of transaction: Sale Refund Authorization | 16 | Alphanumeric | yes |

OriginalTransactionID

| Field Name | Description | MAX Length | Format | Require |
|-----------------------|---|------------|--------------|----------|
| OriginalTransactionID | Result of the previous transaction received from Ecompayment as part of their response. | 16 | Alphanumeric | optional |

ReturnPage

| Field Name | Description | MAX Length | Format | Require |
|------------|--|------------|--------------|----------|
| ReturnPage | A webpage on a merchant website to be redirected with the result of a transaction. | 64 | Alphanumeric | optional |

IP

| Field Name | Description | MAX Length | Format | Require |
|------------|--------------------|------------|--------------|---------|
| IP | Client IP address. | 16 | Alphanumeric | yes |

Invoice

| Field Name | Description | MAX Length | Format | Require |
|------------|---|------------|--------------|----------|
| Invoice | Invoice order number generated from Sale. | 32 | Alphanumeric | optional |

InvoiceDescription

| Field Name | Description | MAX Length | Format | Require |
|--------------------|-------------------------------|------------|--------------|----------|
| InvoiceDescription | Merchant Invoice Description. | 64 | Alphanumeric | optional |

BillingFirstName

| Field Name | Description | MAX Length | Format | Require |
|------------------|-----------------------------------|------------|--------------|---------|
| BillingFirstName | The First name of the Card Holder | 32 | Alphanumeric | yes |

BillingLastName

| Field Name | Description | MAX Length | Format | Require |
|-----------------|----------------------------------|------------|--------------|---------|
| BillingLastName | The Last name of the Card Holder | 32 | Alphanumeric | yes |

BillingAddress1

| Field Name | Description | MAX Length | Format | Require |
|-----------------|--|------------|--------------|---------|
| BillingAddress1 | The billing address of the Card Holder | 128 | Alphanumeric | yes |

BillingAddress2

| Field Name | Description | MAX Length | Format | Require |
|-----------------|--|------------|--------------|----------|
| BillingAddress2 | The billing address of the Card Holder | 128 | Alphanumeric | optional |

BillingCity

| Field Name | Description | MAX Length | Format | Require |
|-------------|-------------------------------------|------------|--------------|---------|
| BillingCity | The billing city of the Card Holder | 128 | Alphanumeric | yes |

BillingState

| Field Name | Description | MAX Length | Format | Require |
|--------------|--|------------|--------------|---------|
| BillingState | The billing state (province) of the Card Holder. | 64 | Alphanumeric | yes |

BillingCountry

| Field Name | Description | MAX Length | Format | Require |
|----------------|---|------------|--------------|---------|
| BillingCountry | Country of the Card Holder. 2-letter country code; ISO3166-1. | 2 | Alphanumeric | yes |

BillingZip

| Field Name | Description | MAX Length | Format | Require |
|------------|--|------------|--------------|---------|
| BillingZIP | he billing postal code of the Card Holder. | 16 | Alphanumeric | yes |

BillingPhone

| Field Name | Description | MAX Length | Format | Require |
|--------------|---------------------------------|------------|--------------|---------|
| BillingPhone | The phone number of Card Holder | 24 | Alphanumeric | yes |

BillingEmail

| Field Name | Description | MAX Length | Format | Require |
|--------------|---------------------------------------|------------|--------------|---------|
| BillingEmail | The email address of the Card Holder. | 48 | Alphanumeric | yes |

ShippingFirstName

| Field Name | Description | MAX Length | Format | Require |
|-------------------|----------------------------------|------------|--------------|----------|
| ShippingFirstName | The First name of the recipient. | 32 | Alphanumeric | optional |

ShippingLastName

| Field Name | Description | MAX Length | Format | Require |
|------------------|---------------------------------|------------|--------------|----------|
| ShippingLastName | The Last name of the recipient. | 32 | Alphanumeric | optional |

ShippingAddress1

| Field Name | Description | MAX Length | Format | Require |
|------------------|---------------------------------------|------------|--------------|----------|
| ShippingAddress1 | The shipping address of the recipient | 128 | Alphanumeric | optional |

Shipping Address2

| Field Name | Description | MAX Length | Format | Require |
|------------------|---------------------------------------|------------|--------------|----------|
| ShippingAddress2 | The shipping address of the recipient | 128 | Alphanumeric | optional |

ShippingCity

| Field Name | Description | MAX Length | Format | Require |
|--------------|------------------------------------|------------|--------------|----------|
| ShippingCity | The shipping City of the recipient | 128 | Alphanumeric | optional |

ShippingState

| Field Name | Description | MAX Length | Format | Require |
|---------------|--|------------|--------------|----------|
| ShippingState | The shipping state (province) of the recipient | 64 | Alphanumeric | optional |

ShippingCountry

| Field Name | Description | MAX Length | Format | Require |
|-----------------|--|------------|--------------|----------|
| ShippingCountry | Shipping country. 2-letter country code; ISO3166-1 | 2 | Alphanumeric | optional |

ShippingZip

| Field Name | Description | MAX Length | Format | Require |
|-------------|--|------------|--------------|----------|
| ShippingZip | The shipping zip code of the recipient | 16 | Alphanumeric | optional |

RebillAmount

| Field Name | Description | MAX Length | Format | Require |
|--------------|---------------------------|------------|--------------|----------|
| RebillAmount | Amount of rebill customer | 16 | Alphanumeric | optional |

RebillPeriod

| Field Name | Description | MAX Length | Format | Require |
|--------------|---|------------|--------------|----------|
| RebillPeriod | Number of day to rebill since Initial transaction | 16 | Alphanumeric | optional |

Custom1

| Field Name | Description | MAX Length | Format | Require |
|------------|--|------------|--------------|----------|
| Custom1 | Additional field that will be return to merchant | 256 | Alphanumeric | optional |

Custom2

| Field Name | Description | MAX Length | Format | Require |
|------------|--|------------|--------------|----------|
| Custom2 | Additional field that will be return to merchant | 256 | Alphanumeric | optional |

Digest

| Field Name | Description | MAX Length | Format | Require |
|------------|-------------------|------------|--------------|---------|
| Digest | Digital signature | 32 | Alphanumeric | yes |

Time Stamp Example

| | |
|------------------|---|
| TimeStamp | <p>Is the number of milliseconds that have elapsed since January 1, 1970 (midnight UTC/GMT)</p> <pre> C# return (long)(DateTime.UtcNow - Jan1st1970).TotalMilliseconds.ToString(); Java string getMillSecondsSinceEpoch() { </pre> |
|------------------|---|

```

        Calendar cal =
        Calendar.getInstance(TimeZone.getTimeZone("GMT"));
        long now = System.currentTimeMillis();

        cal.setTimeInMillis(now);
        return Long.toString(cal.getTimeInMillis());
    }

    PHP
    public function getMillSecondsSinceEpoch()
    {
        return (time() * 1000);
    }

```

Sending transaction

To send your transaction data to our API, simply send all required fields using either HTTP GET or HTTP POST.

If optional "ReturnPage" parameter is not passed, API outputs XML described in section XI. In this case, a most likely scenario for integration is using Ajax call, and then utilizing returned XML for further processing. Here is an example of a synchronous Ajax call using HTTP GET in JavaScript:

```

request = new XMLHttpRequest();
request.open('GET', URL, false);    // It can be URL described above
request.send();                    // because of "false" above, will block until the request is done
                                   // and status is available. Not recommended, used for an example
sake
if (request.status === 200)
    xmlDoc= request.responseXML;

```

Alternatively, merchant can simply submit a form that contains ReturnPage input, contains name of the page to which the result of transaction needs to be sent for processing. For example, the following HTML can be used, where DomainName is either Ecompayment production or testing environments.

```

<form id="form1" method="post" action=" https:// <DomainName>/gt1.aspx">
<table>
...
<tr>
    <td>Enter First Name</td>
    <td><input type="text" id="BillingFirstName" /></td>
</tr>
<tr>
    <td>Enter Last Name</td>

```

```
    <td><input type="text" id="BillingLastName" /></td>
</tr>
...
<tr>
    <td></td>
    <td><input type="hidden" id="ReturnPage"
value="http://www.mysite.com/transresult.aspx"/></td>
</tr>
<tr>
    <td></td>
    <td><input type="submit" id="Button_submit" value="Submit" /></td>
</tr>
</table>
</form>
```

Generate Digest

Ecompayment accepts only requests for which it can be proved that the originator of the request is an authorized subject (i.e. merchant) with whom Ecompayment has signed a contract. At the moment of signing the contract, the merchant will receive MerchantID together with the MerchantKey. MerchantKey must be used to generate Digest signature.

This is a secret key used to calculate the checksum in each transaction request. All transactions will contain a checksum; the checksum is calculated by concatenating data from specific fields in the transaction and the checksum is calculated using SHA-256 algorithm.

Digest = SHA256 (timestamp + merchantID + MerchantKey)

C# Example

```
private void example()
{
    string merchantId = "M0000001";
    string merchantKey = "test key";
    string milliseconds = getMillisecondsSinceEpoch();
    string sig = generateSignature(milliseconds, merchantId, merchantKey);
    Console.WriteLine(sig);
}

string generateSignature(string milliseconds, string merchantId, string merchantKey)
{
    SHA256 lclMD = SHA256Managed.Create();
    byte[] lclResult = lclMD.ComputeHash(Encoding.ASCII.GetBytes(milliseconds +
merchantId +
merchantKey));
```

```
        string sig = System.BitConverter.ToString(lclResult).Replace("-", string.Empty);
        return sig;
    }

    static readonly DateTime Jan1st1970 = new DateTime(1970, 1, 1, 0, 0, 0, DateTimeKind.Utc);

    static string getMillSecondsSinceEpoch()
    {
        return (DateTime.UtcNow - Jan1st1970).TotalMilliseconds.ToString();
    }

    sig: 33CBB9557B24BA7251ACF46D03195476AEB284FFB087E276133825602B6BA800
```

Java Example

```
void example()
{
    string merchantId = "M0000001";
    string merchantKey = "test key";
    string millSeconds = getMillSecondsSinceEpoch();
    string sig = generateSignature(millSeconds, merchantId, merchantKey);
}

string generateSignature(string millSeconds, string merchantId, string merchantKey)
{
    MessageDigest lclMD = MessageDigest.getInstance("SHA-256");
    lclMD.update((millSeconds + merchantId + merchantKey).getBytes());
    byte[] lclResult = lclMD.digest();

    sig = new String(Hex.encodeHex(lclResult));
    return sig;
}

string getMillSecondsSinceEpoch()
{
    Calendar cal = Calendar.getInstance(TimeZone.getTimeZone("GMT"));
    long now = System.currentTimeMillis();

    cal.setTimeInMillis(now);
    return Long.toString(cal.getTimeInMillis());
}
```

PHP Example

```
public function example()
{
    $merchantId = "M0000001";
    $merchantKey = "test key";
    $millSeconds = getMillSecondsSinceEpoch();
    $sig = generateSignature(millSeconds, merchantId, merchantKey);
}

public function generateSignature($millSeconds, $merchantId, $merchantKey)
{
    $sig = hash('sha256', $millSeconds.$merchantId.$merchantKey);
    return $sig;
}

public function getMillSecondsSinceEpoch()
{
    return (time() * 1000);
}
```

Transaction types

Ecompayment support the following transaction types:

| Name | Description |
|-----------------------|--|
| Sale | Sale transaction |
| Refund | Refund transaction |
| Authorization | Authorization transaction |
| Capture | Capture previously authorization transaction |
| Void | Void previously authorization transaction |
| RepeatSale | Repeat Sale transaction |
| CancelRebiling | Cancel rebilling transaction |

Sale Transaction

This is the easiest way to bill an amount over a card. The Sale operation collects immediately the amount desired.

Example of sale transaction

```
https://<DomainName>/gt1.aspx?MerchantID=M0000001&MerchantToken=222233334444&
TimeStamp=123456789&MerchantTransactionID=1234567812345678&CardNumber=45127
70100021281&CardExp=0316&CardCVV=978&Amount=63.12&Currency=USD&Transactio
nType=Sale&IP=211.168.0.1&Invoice=Invoice_0013456&InvoiceDescription=ItemClip&Billin
gFirstName=John&BillingLastName=Doe&BillingAddress1=331 Broadway rd. Apt
95&BillingCity=New
York&BillingState=NY&BillingCountry=US&BillingZip=10234&BillingPhone=2129781111111&
BillingEmail=john@ntr.net&ShippingFirstName=Jane&ShippingLastName=Doe&ShippingAdd
ress1=1212 W. Tropicana Apt
201&ShippingCity=LasVegas&ShippingState=Nv&ShippingCountry=US&ShippingZip=89123
&Custom1=Additional info&Custom2=AdditionalInfo2&
Digest=9baf9ec644f1b6c6fa801a1e29eec740d3972ec33c743f4aeec552fb0d7697ae
```

Sale transaction with rebilling

Example of sale transaction with rebilling

```
https://<DomainName>/gt1.aspx?MerchantID=M0000001&MerchantToken=222233334444&
TimeStamp=123456789&MerchantTransactionID=1234567812345678&CardNumber=45127
70100021281&CardExp=0316&CardCVV=978&Amount=63.12&Currency=USD&Transactio
nType=Sale&IP=211.168.0.1&Invoice=Invoice_0013456&InvoiceDescription=ItemClip&Billin
gFirstName=John&BillingLastName=Doe&BillingAddress1=331 Broadway rd. Apt
95&BillingCity=NewYork&BillingState=NY&BillingCountry=US&BillingZip=10234&BillingPhon
e=212978111111111&BillingEmail=john@ntr.net&ShippingFirstName=Jane&ShippingLastNam
e=Doe&ShippingAddress1=1212 W. Tropicana Apt
201&ShippingCity=LasVegas&ShippingState=Nv&ShippingCountry=US&ShippingZip=89123
&Custom1=Additional
info&Custom2=AdditionalInfo2&RebillAmount=63.12&RebillPeriod=30&
Digest=9baf9ec644f1b6c6fa801a1e29eec740d3972ec33c743f4aeec552fb0d7697ae
```

Rebiling transaction sets an automatic reoccurring payment. If rebilling transaction will be declined by bank, merchant will receive immediately email notification.

NOTE: Rebill Amount can be different from Sale Amount

Refund transaction

The Refund operation, as its name states, consists of returning the money already collected by a **Sale** or a **Capture** transaction. The amount collected can be refunded in total or partially. You cannot refund amounts bigger than the one sent in the original transaction. Refund can only be performed if a customer has not initiated a chargeback procedure. In this case you must dispute the chargeback according to the standard procedure provided by the Sales.

Example of refund transaction

```
https://<DomainName>/gt1.aspx?MerchantID=M0000001&MerchantToken=222233334444&
TimeStamp=123456789&MerchantTransactionID=1234567812345678&CardNumber=45127
70100021281&CardExp=0316&CardCVV=978&Amount=63.12&Currency=USD&Transactio
nType=Refund&OriginalTransactionID=345600011112222&IP=211.168.0.1&Invoice=Invoi
ce_0013456&InvoiceDescription=ItemClip&BillingFirstName=John&BillingLastName=Doe&Bil
lingAddress1=331 Broadway rd. Apt
95&BillingCity=NewYork&BillingState=NY&BillingCountry=US&
BillingZip=10234&BillingPhone=2129781111111&BillingEmail=john@ntr.net&ShippingFirstNa
me=Jane
&ShippingLastName=Doe&ShippingAddress1=1212 W. Tropicana
Apt201&ShippingCity=LasVegas&ShippingState=
NV&ShippingCountry=US&ShippingZip=89123&Custom1=Additional
info&Custom2=AdditionalInfo2&
Digest=9baf9ec644f1b6c6fa801a1e29eec740d3972ec33c743f4aeec552fb0d7697ae
```

NOTE: **OriginalTransactionID** for Refund must be equal to previously received TransactionID from Sale Response. Only one refund operation can be performed per sale.

Authorization transaction

The authorize operation allows the merchant to book the desired money from the card that will be invoiced. This is the preferred method since it provides the bank authorization to collect the money from the customer, but without collect it immediately. This operation has two-steps and must be always completed by voiding the transaction or capturing, the completion can be done within an average time of 20 days.

Example of authorize transaction

```
https://<DomainName>/gt1.aspx?MerchantID=M0000001MerchantToken=222233334444&TimeStamp=123456789&MerchantTransactionID=1234567812345678&CardNumber=4512770100021281&CardExp=0316&CardCVV=978&Amount=63.12&Currency=USD&TransactionType=Authorization&IP=211.168.0.1&Invoice=Invoice_0013456&InvoiceDescription=ItemClip&BillingFirstName=John&BillingLastName=Doe&BillingAddress1=331 Broadway rd. Apt 95&BillingCity=NewYork&BillingState=NY&BillingCountry=US&BillingZip=10234&BillingPhone=212978111111&BillingEmail=john@ntr.net&ShippingFirstName=Jane&ShippingLastName=Doe&ShippingAddress1=1212 W. Tropicana Apt201&ShippingCity=LasVegas&ShippingState=Nv&ShippingCountry=US&ShippingZip=89123&Custom1=Additional info&Custom2=AdditionalInfo2&Digest=9baf9ec644f1b6c6fa801a1e29eec740d3972ec33c743f4aeec552fb0d7697ae
```

Capture transaction

Capture operation consists of collecting the money from authorizations previously done. Normally a Capture is performed for the total amount of the transaction but it might be possible to capture only part of the money reserved

Example of capture transaction

```
https://<DomainName>/gt1.aspx?MerchantID=M0000001&MerchantToken=222233334444&TimeStamp=123456789&MerchantTransactionID=1234567812345678&CardNumber=4512770100021281&CardExp=0316&CardCVV=978&Amount=63.12&Currency=USD&TransactionType=Capture&OriginalTransactionID=345600011112222&IP=211.168.0.1&Invoice=Invoice_0013456&InvoiceDescription=ItemClip&BillingFirstName=John&BillingLastName=Doe&BillingAddress1=331 Broadway rd. Apt 95&BillingCity=NewYork&BillingState=NY&BillingCountry=US&BillingZip=10234&BillingPhone=212978111111&BillingEmail=john@ntr.net&ShippingFirstName=Jane&ShippingLastName=Doe&ShippingAddress1=1212 W. Tropicana Apt201&ShippingCity=LasVegas&ShippingState=Nv&ShippingCountry=US&ShippingZip=89123&Custom1=Additional info&Custom2=AdditionalInfo2&Digest=9baf9ec644f1b6c6fa801a1e29eec740d3972ec33c743f4aeec552fb0d7697ae
```

NOTE: OriginalTransactionID for Capture must be equal to previously received TransactionID from Authorization Response. Only one Capture operation can be performed per Authorization.

Void transaction

The Void operation is used to avoid collecting the money from authorizations previously done. This releases the money blocked from the credit card without collecting it.

Example of void transaction

```
https://<DomainName>/gt1.aspx?MerchantID=M0000001&MerchantToken=222233334444&
TimeStamp=123456789&MerchantTransactionID=1234567812345678&CardNumber=45127
70100021281&CardExp=0316&CardCVV=978&Amount=63.12&Currency=USD&Transactio
nType=Void&OriginalTransactionID=345600011112222&IP=211.168.0.1&Invoice=Invoice_
0013456&InvoiceDescription=ItemClip&BillingFirstName=John&BillingLastName=Doe&Billing
Address1=331 Broadway rd. Apt
95&BillingCity=NewYork&BillingState=NY&BillingCountry=US&
BillingZip=10234&BillingPhone=2129781111111&BillingEmail=john@ntr.net&ShippingFirstNa
me=Jane&ShippingLastName=Doe&ShippingAddress1=1212 W. Tropicana
Apt201&ShippingCity=LasVegas&ShippingState=
NV&ShippingCountry=US&ShippingZip=89123&Custom1=Additional
info&Custom2=AdditionalInfo2&
Digest=9baf9ec644f1b6c6fa801a1e29eec740d3972ec33c743f4aeec552fb0d7697ae
```

NOTE: OriginalTransactionID for Void transaction must be equal to a previously received TransactionID from Authorized Response. Void transaction can be send only to a previously authorized transaction. If a capture transaction has been executed, merchant needs to send a refund transaction.

Repeat sale transaction

The main difference between Rebilling and Repeat Sale is Ecompayment will automatically process the Rebilling on each rebilling period, while Repeat Sale will be initiating by merchant. In many cases merchant need to perform another sale transactions with the same parameters as previous sale. In order not to collect them again from Customer, merchant can send a transaction to repeat sale, using the OriginalTransactionID as result from previous sale transaction with Amount. By sending this type of transaction, merchant save the time and not needed to transmit all the parameters again.

Example of repeat sale transaction

```
https://<DomainName>/gt1.aspx?MerchantID=M0000001&MerchantToken=222233334444&
TimeStamp=123456789&MerchantTransactionID=1234567812345678&Amount=63.12&Tran
sactionType=RepeatSale&OriginalTransactionID=345600011112222&Custom1=Additiona
l info&Custom2=AdditionalInfo2&
Digest=9baf9ec644f1b6c6fa801a1e29eec740d3972ec33c743f4aeeec552fb0d7697ae
```

NOTE: **OriginalTransactionID** for Repeat Sale must be equal to previously received TransactionID from sale Response. Merchant does not need to supply Credit card number. Amount can be the same or different from previous sale transaction. Repeat Sale transaction can be sending only to previously approved sale transaction.

Cancel rebilling transaction

Cancel Rebilling operation is used to stop an automatic reoccurring payment that was previously set.

Example of repeat sale transaction

```
https://<DomainName>/gt1.aspx?MerchantID=M0000001&MerchantToken=222233334444&
TimeStamp=123456789&CardNumber=4512770100021281&TransactionType=CancelRebi
lling& Digest=9baf9ec644f1b6c6fa801a1e29eec740d3972ec33c743f4aeeec552fb0d7697ae
```

NOTE: Merchant needs to supply Credit Card number to cancel rebilling.

Ecompayment Filters

Ecompayment offers an ability to block transactions before they reach an acquiring bank. Merchant can set what particular information he wants to block.

| Filter Name | Description |
|------------------------|---|
| CC Filter | Block any transaction that contains a particular Credit Card Number. |
| BIN Filter | Block any transaction that contains a particular BIN Number. |
| Country Filter | Block any transaction that contains any BIN issued in a particular country |
| Name Filter | Block any transaction that contains particular Last and First Name |
| IP Filter | Block any transaction that contains a particular IP or IP Range Address |
| Amount Filter | Block transaction that Amount greater than a particular amount |
| Velocity Filter | Block transaction for the same credit card that occurs within a configured time limit |

CC Filter

If Merchant decides to block a particular Credit Card Number, filter "Credit Card" needs to be set. Merchant can enter one or many CC numbers that he wants to block.

BIN Filter

If Merchant decides to block a particular BIN number, filter "BIN Block" needs to be set. Merchant can enter one or many BIN number he wants to block.

Country Filter

If Merchant wants to block any transaction from a particular country, filter "Country Block" needs to be set. Merchant can enter one or many countries he wants to block. Ecompayment will verify BIN from an incoming transaction against a country BIN database and block the transaction if BIN has been issued by that country.

Name Filter

If Merchant wants to block a transaction that contains a particular Card Holder name, filter "Name Block" needs to be set. Merchant can enter one or many Last and First name combinations he wants to block.

IP Filter

If Merchant wants to block any transaction that comes from a particular IP Address or IP range, filter "IP Block" needs to be set. Merchant can enter one or many IP Addresses he wants to block. Merchant can set a particular IP Address or an IP range.

Filter example:

Merchant sets to block 211.168.0.1

(Merchant can set IP Range as follow: 211.168.0.XXX or 211.168.XXX.XXX or 211.XXX.XXX.XXX)

Amount Limit Filter

If Merchant wants to block any transaction where amount exceeds a certain limit, filter "Amount Block" needs to be set. Merchant enters a maximum amount (limit) that cannot be exceeded.

Velocity Filter

If Merchant wants to block any transaction with the same Credit Card number that occurs before a specified time period runs out, filter "Velocity Block" needs to be used. Merchant can enter limit (1 - 24 hours) he wants to block.

Filter Example:

Merchant sets limit to 1 hour

If transaction occurs at 10am and transaction with the same Credit Card number is sent again at 10:10 am or 10:59 am, it will be blocked.

| | | |
|----------------|-----------|----------------|
| Administration | Reporting | Filter setting |
|----------------|-----------|----------------|

FILTER SETTING

Add New Filter

Merchant M0000077

| Filter Type | Filter Value |
|-------------|--------------------------------------|
| CC | |
| BIN | |
| CC | (e.g. 1111222233334444) 15-17 digits |
| Country | |
| Limit | |
| IP | |
| Name | |
| Velocity | |

Credit Card

| | | |
|----------------|-----------|----------------|
| Administration | Reporting | Filter setting |
|----------------|-----------|----------------|

FILTER SETTING

Add New Filter

Merchant

| Filter Type | Filter Value | |
|-------------|----------------------|--|
| BIN | 445672 | Edit  |
| CC | 4216455500000002 | Edit  |
| Country | Anguilla | Edit  |
| Name | <input type="text"/> | <input type="button" value="Add"/> |

First name and Last name (e.g. James Bond)

Response

Depending on whether ReturnPage parameter passed or not, Response will be sent in a form of XML or query string parameters to a web-page specified in ReturnPage.

Approved response example:

```
<CardResponse >
<IsApproved>True</IsApproved>
<IsFiltered>True</IsFiltered>
<TransactionID>4443477080604672</TransactionID>
<MerchantTransactionID>1234567812345678</MerchantTransactionID>
<ResponseCode>000</ResponseCode>
<ResponseMessage/>
<InvoiceNumber>Invoice_0013456</InvoiceNumber>
<BankTransactionID>860181744</BankTransactionID>
<BankResponseCode>00</BankResponseCode>
<BankResponseMessage>ApproveTEST</BankResponseMessage>
<Custom1/>
<Custom2/>
</CardResponse >
```

Denied response example (if denied by filter system):

```
<CardResponse >
<IsApproved>False</IsApproved>
<IsFiltered>True</IsFiltered>
<TransactionID>7085661776773120</TransactionID>
<MerchantTransactionID>1234567812345678</MerchantTransactionID>
<ResponseCode>007</ResponseCode>
<ResponseMessage>Amount Limit is exceeded</ResponseMessage>
<InvoiceNumber>Invoice_0013456</InvoiceNumber>
<BankTransactionID/>
<BankResponseCode/>
<BankResponseMessage/>
<Custom1/>
<Custom2/>
</CardResponse >
```

Denied response example (passed filters, denied by the acquiring bank):

```
<CardResponse >
<IsApproved>False</IsApproved>
<IsFiltered>True</IsFiltered>
<TransactionID>4443477080604672</TransactionID>
<MerchantTransactionID>1234567812345678</MerchantTransactionID>
<ResponseCode>000</ResponseCode>
<ResponseMessage/>
<InvoiceNumber>Invoice_0013456</InvoiceNumber>
<BankTransactionID>860183034</BankTransactionID>
<BankResponseCode>05</BankResponseCode>
<BankResponseMessage>Card CVV not valid </BankResponseMessage>
<Custom1/>
<Custom2/>
</CardResponse >
```


Filter Response Values (ResponseCode field)

<ResponseCode>000</ResponseCode>

| Value | Description |
|-------|--|
| 000 | Transaction passed filter system, or Merchant does not set any filters to use |
| 001 | Blocked by Credit Card Filter |
| 002 | Blocked by BIN Filter |
| 003 | Blocked by Country Filter |
| 004 | Country Database does not contain a submitted BIN. At this point Merchant can decide to continue to process transaction or stop it |
| 005 | Blocked by Card holder name filter |
| 006 | Blocked by IP Address Filter |
| 007 | Blocked by Amount Limit Filter |
| 008 | Blocked by Velocity Filter |

Ecompayment System Error Codes (Response Code field)

Any System related code will be placed into Filtered Reason Field

| Value | Description |
|-------|---|
| 201 | Database error on Parameter [Block CC Filter]. Transaction has not been processed. |
| 202 | Database error on Parameter [Block BIN Filter]. Transaction has not been processed. |
| 203 | Database error on Parameter [Country Filter]. Transaction has not been processed. |
| 205 | Database error on Parameter [Name Block Filter]. Transaction has not been processed. |
| 206 | Database error on Parameter [IP Filter]. Transaction has not been processed. |
| 207 | Database error on Parameter [Floor Limit Filter]. Transaction has not been processed. |
| 208 | Database error on Parameter [Velocity Filter]. Transaction has not been processed. |

| | |
|------------|--|
| 201 | Database error on Parameter [Block CC Filter]. Transaction has not been processed. |
| 100 | Incorrect Digest signature |
| 101 | Incorrect format for transaction (Capture, Void, Refund) |
| 102 | Incorrect Merchant ID |
| 120 | Internal Database Error |
| 121 | Internal Database Error |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Bank returns Codes (Bank Response Code field)

| Value | Description |
|--------------|---|
| 00 | Transaction approved |
| 01 | Decline to Cardholder Risk Code. Bank declined transaction due to card or customer name has been blacklisted in their database |
| 02 | Decline to Issuing bank. Bank declined transaction because cardholder issuing bank did not authorized sale |
| 03 | Not sufficient funds |
| 04 | Duplicate Order. The same card number has being processed for the last 12 hours |
| 05 | Decline to Issuing bank. Bank declined transaction because cardholder issuing bank did not authorized sale |
| 06 | Decline to Cardholder Risk Code. Bank declined transaction due to card or customer name has been blacklisted in their database |
| 07 | Decline to Cardholder Risk Code. Bank declined transaction due to card or customer name has been blacklisted in their database |
| 08 | Refer to card Issuer. Bank declined transaction because cardholder issuing bank did not authorized sale |
| 10 | Declined Refund Transaction. Bank declined refund transaction due to transaction was charge backed by cardholder or enough time passed to refund amount. More than 60 days. |

Appendix ISO 4217

The following is a list of active codes of official ISO 4217 currency names.
Unified System for Regional Compensation

| ENTITY | Currency | Alphabetic Code | Numeric Code | Minor unit |
|----------------------------------|-----------------------|-----------------|--------------|------------|
| AFGHANISTAN | Afghani | AFN | 971 | 2 |
| ÅLAND ISLANDS | Euro | EUR | 978 | 2 |
| ALBANIA | Lek | ALL | 008 | 2 |
| ALGERIA | Algerian Dinar | DZD | 012 | 2 |
| AMERICAN SAMOA | US Dollar | USD | 840 | 2 |
| ANDORRA | Euro | EUR | 978 | 2 |
| ANGOLA | Kwanza | AOA | 973 | 2 |
| ANGUILLA | East Caribbean Dollar | XCD | 951 | 2 |
| ANTARCTICA | No universal currency | | | |
| ANTIGUA AND BARBUDA | East Caribbean Dollar | XCD | 951 | 2 |
| ARGENTINA | Argentine Peso | ARS | 032 | 2 |
| ARMENIA | Armenian Dram | AMD | 051 | 2 |
| ARUBA | Aruban Florin | AWG | 533 | 2 |
| AUSTRALIA | Australian Dollar | AUD | 036 | 2 |
| AUSTRIA | Euro | EUR | 978 | 2 |
| AZERBAIJAN | Azerbaijani Manat | AZN | 944 | 2 |
| BAHAMAS | Bahamian Dollar | BSD | 044 | 2 |
| BAHRAIN | Bahraini Dinar | BHD | 048 | 3 |
| BANGLADESH | Taka | BDT | 050 | 2 |
| BARBADOS | Barbados Dollar | BBD | 052 | 2 |
| BELARUS | Belarussian Ruble | BYR | 974 | 0 |
| BELGIUM | Euro | EUR | 978 | 2 |
| BELIZE | Belize Dollar | BZD | 084 | 2 |
| BENIN | CFA Franc BCEAO | XOF | 952 | 0 |
| BERMUDA | Bermudian Dollar | BMD | 060 | 2 |
| BHUTAN | Ngultrum | BTN | 064 | 2 |
| BHUTAN | Indian Rupee | INR | 356 | 2 |
| BOLIVIA, PLURINATIONAL STATE OF | Boliviano | BOB | 068 | 2 |
| BOLIVIA, PLURINATIONAL STATE OF | Mvdol | BOV | 984 | 2 |
| BONAIRE, SINT EUSTATIUS AND SABA | US Dollar | USD | 840 | 2 |
| BOSNIA AND HERZEGOVINA | Convertible Mark | BAM | 977 | 2 |
| BOTSWANA | Pula | BWP | 072 | 2 |
| BOUVET ISLAND | Norwegian Krone | NOK | 578 | 2 |
| BRAZIL | Brazilian Real | BRL | 986 | 2 |
| BRITISH INDIAN OCEAN TERRITORY | US Dollar | USD | 840 | 2 |
| BRUNEI DARUSSALAM | Brunei Dollar | BND | 096 | 2 |

| | | | | |
|--------------------------------------|----------------------------------|-----|-----|---|
| BULGARIA | Bulgarian Lev | BGN | 975 | 2 |
| BURKINA FASO | CFA Franc BCEAO | XOF | 952 | 0 |
| BURUNDI | Burundi Franc | BIF | 108 | 0 |
| CAMBODIA | Riel | KHR | 116 | 2 |
| CAMEROON | CFA Franc BEAC | XAF | 950 | 0 |
| CANADA | Canadian Dollar | CAD | 124 | 2 |
| CAPE VERDE | Cape Verde Escudo | CVE | 132 | 2 |
| CAYMAN ISLANDS | Cayman Islands Dollar | KYD | 136 | 2 |
| CENTRAL AFRICAN REPUBLIC | CFA Franc BEAC | XAF | 950 | 0 |
| CHAD | CFA Franc BEAC | XAF | 950 | 0 |
| CHILE | Unidad de Fomento | CLF | 990 | 4 |
| CHILE | Chilean Peso | CLP | 152 | 0 |
| CHINA | Yuan Renminbi | CNY | 156 | 2 |
| CHRISTMAS ISLAND | Australian Dollar | AUD | 036 | 2 |
| COCOS (KEELING) ISLANDS | Australian Dollar | AUD | 036 | 2 |
| COLOMBIA | Colombian Peso | COP | 170 | 2 |
| COLOMBIA | Unidad de Valor Real | COU | 970 | 2 |
| COMOROS | Comoro Franc | KMF | 174 | 0 |
| CONGO | CFA Franc BEAC | XAF | 950 | 0 |
| CONGO, DEMOCRATIC REPUBLIC OF THE | Congolese Franc | CDF | 976 | 2 |
| COOK ISLANDS | New Zealand Dollar | NZD | 554 | 2 |
| COSTA RICA | Costa Rican Colon | CRC | 188 | 2 |
| CÔTE D'IVOIRE | CFA Franc BCEAO | XOF | 952 | 0 |
| CROATIA | Croatian Kuna | HRK | 191 | 2 |
| CUBA | Peso Convertible | CUC | 931 | 2 |
| CUBA | Cuban Peso | CUP | 192 | 2 |
| CURAÇAO | Netherlands Antillean Guilder | ANG | 532 | 2 |
| CYPRUS | Euro | EUR | 978 | 2 |
| CZECH REPUBLIC | Czech Koruna | CZK | 203 | 2 |
| DENMARK | Danish Krone | DKK | 208 | 2 |
| DJIBOUTI | Djibouti Franc | DJF | 262 | 0 |
| DOMINICA | East Caribbean Dollar | XCD | 951 | 2 |
| DOMINICAN REPUBLIC | Dominican Peso | DOP | 214 | 2 |
| ECUADOR | US Dollar | USD | 840 | 2 |
| EGYPT | Egyptian Pound | EGP | 818 | 2 |
| EL SALVADOR | El Salvador Colon | SVC | 222 | 2 |
| EL SALVADOR | US Dollar | USD | 840 | 2 |
| EQUATORIAL GUINEA | CFA Franc BEAC | XAF | 950 | 0 |
| ERITREA | Nakfa | ERN | 232 | 2 |
| ESTONIA | Euro | EUR | 978 | 2 |
| ETHIOPIA | Ethiopian Birr | ETB | 230 | 2 |
| EUROPEAN UNION | Euro | EUR | 978 | 2 |
| FALKLAND ISLANDS (MALVINAS) | Falkland Islands Pound | FKP | 238 | 2 |
| FAROE ISLANDS | Danish Krone | DKK | 208 | 2 |
| FIJI | Fiji Dollar | FJD | 242 | 2 |

| | | | | |
|-----------------------------------|-----------------------------|-----|-----|------|
| FINLAND | Euro | EUR | 978 | 2 |
| FRANCE | Euro | EUR | 978 | 2 |
| FRENCH GUIANA | Euro | EUR | 978 | 2 |
| FRENCH POLYNESIA | CFP Franc | XPF | 953 | 0 |
| FRENCH SOUTHERN TERRITORIES | Euro | EUR | 978 | 2 |
| GABON | CFA Franc BEAC | XAF | 950 | 0 |
| GAMBIA | Dalasi | GMD | 270 | 2 |
| GEORGIA | Lari | GEL | 981 | 2 |
| GERMANY | Euro | EUR | 978 | 2 |
| GHANA | Ghana Cedi | GHS | 936 | 2 |
| GIBRALTAR | Gibraltar Pound | GIP | 292 | 2 |
| GREECE | Euro | EUR | 978 | 2 |
| GREENLAND | Danish Krone | DKK | 208 | 2 |
| GRENADA | East Caribbean Dollar | XCD | 951 | 2 |
| GUADELOUPE | Euro | EUR | 978 | 2 |
| GUAM | US Dollar | USD | 840 | 2 |
| GUATEMALA | Quetzal | GTQ | 320 | 2 |
| GUERNSEY | Pound Sterling | GBP | 826 | 2 |
| GUINEA | Guinea Franc | GNF | 324 | 0 |
| GUINEA-BISSAU | CFA Franc BCEAO | XOF | 952 | 0 |
| GUYANA | Guyana Dollar | GYD | 328 | 2 |
| HAITI | Gourde | HTG | 332 | 2 |
| HAITI | US Dollar | USD | 840 | 2 |
| HEARD ISLAND AND McDONALD ISLANDS | Australian Dollar | AUD | 036 | 2 |
| HOLY SEE (VATICAN CITY STATE) | Euro | EUR | 978 | 2 |
| HONDURAS | Lempira | HNL | 340 | 2 |
| HONG KONG | Hong Kong Dollar | HKD | 344 | 2 |
| HUNGARY | Forint | HUF | 348 | 2 |
| ICELAND | Iceland Krona | ISK | 352 | 0 |
| INDIA | Indian Rupee | INR | 356 | 2 |
| INDONESIA | Rupiah | IDR | 360 | 2 |
| INTERNATIONAL MONETARY FUND (IMF) | SDR (Special Drawing Right) | XDR | 960 | N.A. |
| IRAN, ISLAMIC REPUBLIC OF | Iranian Rial | IRR | 364 | 2 |
| IRAQ | Iraqi Dinar | IQD | 368 | 3 |
| IRELAND | Euro | EUR | 978 | 2 |
| ISLE OF MAN | Pound Sterling | GBP | 826 | 2 |
| ISRAEL | New Israeli Sheqel | ILS | 376 | 2 |
| ITALY | Euro | EUR | 978 | 2 |
| JAMAICA | Jamaican Dollar | JMD | 388 | 2 |
| JAPAN | Yen | JPY | 392 | 0 |
| JERSEY | Pound Sterling | GBP | 826 | 2 |
| JORDAN | Jordanian Dinar | JOD | 400 | 3 |
| KAZAKHSTAN | Tenge | KZT | 398 | 2 |

| | | | | |
|--|--------------------------------------|-----|-----|------|
| KENYA | Kenyan Shilling | KES | 404 | 2 |
| KIRIBATI | Australian Dollar | AUD | 036 | 2 |
| KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF | North Korean Won | KPW | 408 | 2 |
| KOREA, REPUBLIC OF | Won | KRW | 410 | 0 |
| KUWAIT | Kuwaiti Dinar | KWD | 414 | 3 |
| KYRGYZSTAN | Som | KGS | 417 | 2 |
| LAO PEOPLE'S DEMOCRATIC REPUBLIC | Kip | LAK | 418 | 2 |
| LATVIA | Euro | EUR | 978 | 2 |
| LEBANON | Lebanese Pound | LBP | 422 | 2 |
| LESOTHO | Loti | LSL | 426 | 2 |
| LESOTHO | Rand | ZAR | 710 | 2 |
| LIBERIA | Liberian Dollar | LRD | 430 | 2 |
| LIBYA | Libyan Dinar | LYD | 434 | 3 |
| LIECHTENSTEIN | Swiss Franc | CHF | 756 | 2 |
| LITHUANIA | Lithuanian Litas | LTL | 440 | 2 |
| LUXEMBOURG | Euro | EUR | 978 | 2 |
| MACAO | Pataca | MOP | 446 | 2 |
| MACEDONIA, THE FORMER YUGOSLAV REPUBLIC OF | Denar | MKD | 807 | 2 |
| MADAGASCAR | Malagasy Ariary | MGA | 969 | 2 |
| MALAWI | Kwacha | MWK | 454 | 2 |
| MALAYSIA | Malaysian Ringgit | MYR | 458 | 2 |
| MALDIVES | Rufiyaa | MVR | 462 | 2 |
| MALI | CFA Franc BCEAO | XOF | 952 | 0 |
| MALTA | Euro | EUR | 978 | 2 |
| MARSHALL ISLANDS | US Dollar | USD | 840 | 2 |
| MARTINIQUE | Euro | EUR | 978 | 2 |
| MAURITANIA | Ouguiya | MRO | 478 | 2 |
| MAURITIUS | Mauritius Rupee | MUR | 480 | 2 |
| MAYOTTE | Euro | EUR | 978 | 2 |
| MEMBER COUNTRIES OF THE AFRICAN DEVELOPMENT BANK GROUP | ADB Unit of Account | XUA | 965 | N.A. |
| MEXICO | Mexican Peso | MXN | 484 | 2 |
| MEXICO | Mexican Unidad de Inversion (UDI) | MXV | 979 | 2 |
| MICRONESIA, FEDERATED STATES OF | US Dollar | USD | 840 | 2 |
| MOLDOVA, REPUBLIC OF | Moldovan Leu | MDL | 498 | 2 |
| MONACO | Euro | EUR | 978 | 2 |
| MONGOLIA | Tugrik | MNT | 496 | 2 |
| MONTENEGRO | Euro | EUR | 978 | 2 |
| MONTSERRAT | East Caribbean Dollar | XCD | 951 | 2 |
| MOROCCO | Moroccan Dirham | MAD | 504 | 2 |
| MOZAMBIQUE | Mozambique Metical | MZN | 943 | 2 |

| | | | | |
|--|-----------------------|-----|-----|---|
| MYANMAR | Kyat | MMK | 104 | 2 |
| NAMIBIA | Namibia Dollar | NAD | 516 | 2 |
| NAMIBIA | Rand | ZAR | 710 | 2 |
| NAURU | Australian Dollar | AUD | 036 | 2 |
| NEPAL | Nepalese Rupee | NPR | 524 | 2 |
| NETHERLANDS | Euro | EUR | 978 | 2 |
| NEW CALEDONIA | CFP Franc | XPF | 953 | 0 |
| NEW ZEALAND | New Zealand Dollar | NZD | 554 | 2 |
| NICARAGUA | Cordoba Oro | NIO | 558 | 2 |
| NIGER | CFA Franc BCEAO | XOF | 952 | 0 |
| NIGERIA | Naira | NGN | 566 | 2 |
| NIUE | New Zealand Dollar | NZD | 554 | 2 |
| NORFOLK ISLAND | Australian Dollar | AUD | 036 | 2 |
| NORTHERN MARIANA ISLANDS | US Dollar | USD | 840 | 2 |
| NORWAY | Norwegian Krone | NOK | 578 | 2 |
| OMAN | Rial Omani | OMR | 512 | 3 |
| PAKISTAN | Pakistan Rupee | PKR | 586 | 2 |
| PALAU | US Dollar | USD | 840 | 2 |
| PALESTINE, STATE OF | No universal currency | | | |
| PANAMA | Balboa | PAB | 590 | 2 |
| PANAMA | US Dollar | USD | 840 | 2 |
| PAPUA NEW GUINEA | Kina | PGK | 598 | 2 |
| PARAGUAY | Guarani | PYG | 600 | 0 |
| PERU | Nuevo Sol | PEN | 604 | 2 |
| PHILIPPINES | Philippine Peso | PHP | 608 | 2 |
| PITCAIRN | New Zealand Dollar | NZD | 554 | 2 |
| POLAND | Zloty | PLN | 985 | 2 |
| PORTUGAL | Euro | EUR | 978 | 2 |
| PUERTO RICO | US Dollar | USD | 840 | 2 |
| QATAR | Qatari Rial | QAR | 634 | 2 |
| RÉUNION | Euro | EUR | 978 | 2 |
| ROMANIA | New Romanian Leu | RON | 946 | 2 |
| RUSSIAN FEDERATION | Russian Ruble | RUB | 643 | 2 |
| RWANDA | Rwanda Franc | RWF | 646 | 0 |
| SAINT BARTHÉLEMY | Euro | EUR | 978 | 2 |
| SAINT HELENA, ASCENSION AND TRISTAN DA CUNHA | Saint Helena Pound | SHP | 654 | 2 |
| SAINT KITTS AND NEVIS | East Caribbean Dollar | XCD | 951 | 2 |
| SAINT LUCIA | East Caribbean Dollar | XCD | 951 | 2 |
| SAINT MARTIN (FRENCH PART) | Euro | EUR | 978 | 2 |
| SAINT PIERRE AND MIQUELON | Euro | EUR | 978 | 2 |
| SAINT VINCENT AND THE GRENADINES | East Caribbean Dollar | XCD | 951 | 2 |
| SAMOA | Tala | WST | 882 | 2 |
| SAN MARINO | Euro | EUR | 978 | 2 |
| SAO TOME AND PRINCIPE | Dobra | STD | 678 | 2 |
| SAUDI ARABIA | Saudi Riyal | SAR | 682 | 2 |

| | | | | |
|--|----------------------------------|-----|-----|------|
| SENEGAL | CFA Franc BCEAO | XOF | 952 | 0 |
| SERBIA | Serbian Dinar | RSD | 941 | 2 |
| SEYCHELLES | Seychelles Rupee | SCR | 690 | 2 |
| SIERRA LEONE | Leone | SLL | 694 | 2 |
| SINGAPORE | Singapore Dollar | SGD | 702 | 2 |
| SINT MAARTEN (DUTCH PART) | Netherlands Antillean Guilder | ANG | 532 | 2 |
| SISTEMA UNITARIO DE COMPENSACION REGIONAL DE PAGOS "SUCRE" | Sucre | XSU | 994 | N.A. |
| SLOVAKIA | Euro | EUR | 978 | 2 |
| SLOVENIA | Euro | EUR | 978 | 2 |
| SOLOMON ISLANDS | Solomon Islands Dollar | SBD | 090 | 2 |
| SOMALIA | Somali Shilling | SOS | 706 | 2 |
| SOUTH AFRICA | Rand | ZAR | 710 | 2 |
| SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS | No universal currency | | | |
| SOUTH SUDAN | South Sudanese Pound | SSP | 728 | 2 |
| SPAIN | Euro | EUR | 978 | 2 |
| SRI LANKA | Sri Lanka Rupee | LKR | 144 | 2 |
| SUDAN | Sudanese Pound | SDG | 938 | 2 |
| SURINAME | Surinam Dollar | SRD | 968 | 2 |
| SVALBARD AND JAN MAYEN | Norwegian Krone | NOK | 578 | 2 |
| SWAZILAND | Lilangeni | SZL | 748 | 2 |
| SWEDEN | Swedish Krona | SEK | 752 | 2 |
| SWITZERLAND | WIR Euro | CHE | 947 | 2 |
| SWITZERLAND | Swiss Franc | CHF | 756 | 2 |
| SWITZERLAND | WIR Franc | CHW | 948 | 2 |
| SYRIAN ARAB REPUBLIC | Syrian Pound | SYP | 760 | 2 |
| TAIWAN, PROVINCE OF CHINA | New Taiwan Dollar | TWD | 901 | 2 |
| TAJIKISTAN | Somoni | TJS | 972 | 2 |
| TANZANIA, UNITED REPUBLIC OF | Tanzanian Shilling | TZS | 834 | 2 |
| THAILAND | Baht | THB | 764 | 2 |
| TIMOR-LESTE | US Dollar | USD | 840 | 2 |
| TOGO | CFA Franc BCEAO | XOF | 952 | 0 |
| TOKELAU | New Zealand Dollar | NZD | 554 | 2 |
| TONGA | Pa'anga | TOP | 776 | 2 |
| TRINIDAD AND TOBAGO | Trinidad and Tobago Dollar | TTD | 780 | 2 |
| TUNISIA | Tunisian Dinar | TND | 788 | 3 |
| TURKEY | Turkish Lira | TRY | 949 | 2 |
| TURKMENISTAN | Turkmenistan New Manat | TMT | 934 | 2 |
| TURKS AND CAICOS ISLANDS | US Dollar | USD | 840 | 2 |
| TUVALU | Australian Dollar | AUD | 036 | 2 |
| UGANDA | Uganda Shilling | UGX | 800 | 0 |
| UKRAINE | Hryvnia | UAH | 980 | 2 |
| UNITED ARAB EMIRATES | UAE Dirham | AED | 784 | 2 |

| | | | | |
|---|--|-----|-----|---|
| UNITED KINGDOM | Pound Sterling | GBP | 826 | 2 |
| UNITED STATES | US Dollar | USD | 840 | 2 |
| UNITED STATES | US Dollar (Next day) | USN | 997 | 2 |
| UNITED STATES MINOR OUTLYING ISLANDS | US Dollar | USD | 840 | 2 |
| URUGUAY | Uruguay Peso en Unidades Indexadas (URUIURUI) | UYI | 940 | 0 |
| URUGUAY | Peso Uruguayo | UYU | 858 | 2 |
| UZBEKISTAN | Uzbekistan Sum | UZS | 860 | 2 |
| VANUATU | Vatu | VUV | 548 | 0 |
| VENEZUELA, BOLIVARIAN REPUBLIC OF | Bolivar | VEF | 937 | 2 |
| VIET NAM | Dong | VND | 704 | 0 |
| VIRGIN ISLANDS (BRITISH) | US Dollar | USD | 840 | 2 |
| VIRGIN ISLANDS (U.S.) | US Dollar | USD | 840 | 2 |
| WALLIS AND FUTUNA | CFP Franc | XPF | 953 | 0 |
| WESTERN SAHARA | Moroccan Dirham | MAD | 504 | 2 |
| YEMEN | Yemeni Rial | YER | 886 | 2 |
| ZAMBIA | Zambian Kwacha | ZMW | 967 | 2 |
| ZIMBABWE | Zimbabwe Dollar | ZWL | 932 | 2 |

Appendix ISO 3166

ISO 3166 Country code

| Code | English Name | French Name |
|------|------------------------|---------------------|
| AD | Andorra | Andorre |
| AE | United Arab Emirates | Émirats arabes unis |
| AF | Afghanistan | Afghanistan |
| AG | Antigua and Barbuda | Antigua-et-Barbuda |
| AI | Anguilla | Anguilla |
| AL | Albania | Albanie |
| AM | Armenia | Arménie |
| AO | Angola | Angola |
| AQ | Antarctica | Antarctique |
| AR | Argentina | Argentine |
| AS | American Samoa | Samoa américaine |
| AT | Austria | Autriche |
| AU | Australia | Australie |
| AW | Aruba | Aruba |
| AX | Åland Islands | Îles d'Åland |
| AZ | Azerbaijan | Azerbaïdjan |
| BA | Bosnia and Herzegovina | Bosnie-Herzégovine |

| | | |
|----|-------------------------------|-----------------------------------|
| BB | Barbados | Barbade |
| BD | Bangladesh | Bangladesh |
| BE | Belgium | Belgique |
| BF | Burkina Faso | Burkina Faso |
| BG | Bulgaria | Bulgarie |
| BH | Bahrain | Bahreïn |
| BI | Burundi | Burundi |
| BJ | Benin | Bénin |
| BL | Saint Barthélemy | Saint-Barthélemy |
| BM | Bermuda | Bermudes |
| BN | Brunei Darussalam | Brunei Darussalam |
| BO | Bolivia | Bolivie |
| BQ | Caribbean Netherlands | Pays-Bas caribéens |
| BR | Brazil | Brésil |
| BS | Bahamas | Bahamas |
| BT | Bhutan | Bhoutan |
| BV | Bouvet Island | Île Bouvet |
| BW | Botswana | Botswana |
| BY | Belarus | Bélarus |
| BZ | Belize | Belize |
| CA | Canada | Canada |
| CC | Cocos (Keeling) Islands | Îles Cocos (Keeling) |
| CD | Congo, Democratic Republic of | Congo, République démocratique du |
| CF | Central African Republic | République centrafricaine |
| CG | Congo | Congo |
| CH | Switzerland | Suisse |
| CI | Côte d'Ivoire | Côte d'Ivoire |
| CK | Cook Islands | Îles Cook |
| CL | Chile | Chili |
| CM | Cameroon | Cameroun |
| CN | China | Chine |
| CO | Colombia | Colombie |
| CR | Costa Rica | Costa Rica |
| CU | Cuba | Cuba |
| CV | Cape Verde | Cap-Vert |
| CW | Curaçao | Curaçao |
| CX | Christmas Island | Île Christmas |
| CY | Cyprus | Chypre |
| CZ | Czech Republic | République tchèque |
| DE | Germany | Allemagne |
| DJ | Djibouti | Djibouti |
| DK | Denmark | Danemark |
| DM | Dominica | Dominique |
| DO | Dominican Republic | République dominicaine |
| DZ | Algeria | Algérie |
| EC | Ecuador | Équateur |
| EE | Estonia | Estonie |

| | | |
|----|--|--|
| EG | Egypt | Égypte |
| EH | Western Sahara | Sahara Occidental |
| ER | Eritrea | Érythrée |
| ES | Spain | Espagne |
| ET | Ethiopia | Éthiopie |
| FI | Finland | Finlande |
| FJ | Fiji | Fidji |
| FK | Falkland Islands | Îles Malouines |
| FM | Micronesia, Federated States of | Micronésie, États fédérés de |
| FO | Faroe Islands | Îles Féroé |
| FR | France | France |
| GA | Gabon | Gabon |
| GB | United Kingdom | Royaume-Uni |
| GD | Grenada | Grenade |
| GE | Georgia | Géorgie |
| GF | French Guiana | Guyane française |
| GG | Guernsey | Guernesey |
| GH | Ghana | Ghana |
| GI | Gibraltar | Gibraltar |
| GL | Greenland | Groenland |
| GM | Gambia | Gambie |
| GN | Guinea | Guinée |
| GP | Guadeloupe | Guadeloupe |
| GQ | Equatorial Guinea | Guinée équatoriale |
| GR | Greece | Grèce |
| GS | South Georgia and the South Sandwich Islands | Géorgie du Sud et les îles Sandwich du Sud |
| GT | Guatemala | Guatemala |
| GU | Guam | Guam |
| GW | Guinea-Bissau | Guinée-Bissau |
| GY | Guyana | Guyana |
| HK | Hong Kong | Hong Kong |
| HM | Heard and McDonald Islands | Îles Heard et McDonald |
| HN | Honduras | Honduras |
| HR | Croatia | Croatie |
| HT | Haiti | Haïti |
| HU | Hungary | Hongrie |
| ID | Indonesia | Indonésie |
| IE | Ireland | Irlande |
| IL | Israel | Israël |
| IM | Isle of Man | Île de Man |
| IN | India | Inde |
| IO | British Indian Ocean Territory | Territoire britannique de l'océan Indien |
| IQ | Iraq | Irak |
| IR | Iran | Iran |
| IS | Iceland | Islande |
| IT | Italy | Italie |

| | | |
|----|----------------------------------|-----------------------|
| JE | Jersey | Jersey |
| JM | Jamaica | Jamaïque |
| JO | Jordan | Jordanie |
| JP | Japan | Japon |
| KE | Kenya | Kenya |
| KG | Kyrgyzstan | Kirghizistan |
| KH | Cambodia | Cambodge |
| KI | Kiribati | Kiribati |
| KM | Comoros | Comores |
| KN | Saint Kitts and Nevis | Saint-Kitts-et-Nevis |
| KP | North Korea | Corée du Nord |
| KR | South Korea | Corée du Sud |
| KW | Kuwait | Koweït |
| KY | Cayman Islands | Îles Caïmans |
| KZ | Kazakhstan | Kazakhstan |
| LA | Lao People's Democratic Republic | Laos |
| LB | Lebanon | Liban |
| LC | Saint Lucia | Sainte-Lucie |
| LI | Liechtenstein | Liechtenstein |
| LK | Sri Lanka | Sri Lanka |
| LR | Liberia | Libéria |
| LS | Lesotho | Lesotho |
| LT | Lithuania | Lituanie |
| LU | Luxembourg | Luxembourg |
| LV | Latvia | Lettonie |
| LY | Libya | Libye |
| MA | Morocco | Maroc |
| MC | Monaco | Monaco |
| MD | Moldova | Moldavie |
| ME | Montenegro | Monténégro |
| MF | Saint-Martin (France) | Saint-Martin (France) |
| MG | Madagascar | Madagascar |
| MH | Marshall Islands | Îles Marshall |
| MK | Macedonia | Macédoine |
| ML | Mali | Mali |
| MM | Myanmar | Myanmar |
| MN | Mongolia | Mongolie |
| MO | Macau | Macao |
| MP | Northern Mariana Islands | Mariannes du Nord |
| MQ | Martinique | Martinique |
| MR | Mauritania | Mauritanie |
| MS | Montserrat | Montserrat |
| MT | Malta | Malte |
| MU | Mauritius | Maurice |
| MV | Maldives | Maldives |
| MW | Malawi | Malawi |
| MX | Mexico | Mexique |

| | | |
|----|--------------------------------|------------------------------|
| MY | Malaysia | Malaisie |
| MZ | Mozambique | Mozambique |
| NA | Namibia | Namibie |
| NC | New Caledonia | Nouvelle-Calédonie |
| NE | Niger | Niger |
| NF | Norfolk Island | Île Norfolk |
| NG | Nigeria | Nigeria |
| NI | Nicaragua | Nicaragua |
| NL | The Netherlands | Pays-Bas |
| NO | Norway | Norvège |
| NP | Nepal | Népal |
| NR | Nauru | Nauru |
| NU | Niue | Niue |
| NZ | New Zealand | Nouvelle-Zélande |
| OM | Oman | Oman |
| PA | Panama | Panama |
| PE | Peru | Pérou |
| PF | French Polynesia | Polynésie française |
| PG | Papua New Guinea | Papouasie-Nouvelle-Guinée |
| PH | Philippines | Philippines |
| PK | Pakistan | Pakistan |
| PL | Poland | Pologne |
| PM | St. Pierre and Miquelon | Saint-Pierre-et-Miquelon |
| PN | Pitcairn | Pitcairn |
| PR | Puerto Rico | Puerto Rico |
| PS | Palestine, State of | Palestine |
| PT | Portugal | Portugal |
| PW | Palau | Palau |
| PY | Paraguay | Paraguay |
| QA | Qatar | Qatar |
| RE | Réunion | Réunion |
| RO | Romania | Roumanie |
| RS | Serbia | Serbie |
| RU | Russian Federation | Russie |
| RW | Rwanda | Rwanda |
| SA | Saudi Arabia | Arabie saoudite |
| SB | Solomon Islands | Îles Salomon |
| SC | Seychelles | Seychelles |
| SD | Sudan | Soudan |
| SE | Sweden | Suède |
| SG | Singapore | Singapour |
| SH | Saint Helena | Sainte-Hélène |
| SI | Slovenia | Slovénie |
| SJ | Svalbard and Jan Mayen Islands | Svalbard et île de Jan Mayen |
| SK | Slovakia | Slovaquie |
| SL | Sierra Leone | Sierra Leone |
| SM | San Marino | Saint-Marin |

| | | |
|----|--------------------------------------|--|
| SN | Senegal | Sénégal |
| SO | Somalia | Somalie |
| SR | Suriname | Suriname |
| SS | South Sudan | Soudan du Sud |
| ST | Sao Tome and Principe | Sao Tomé-et-Principe |
| SV | El Salvador | El Salvador |
| SX | Sint Maarten (Dutch part) | Saint-Martin (Pays-Bas) |
| SY | Syria | Syrie |
| SZ | Swaziland | Swaziland |
| TC | Turks and Caicos Islands | Îles Turks et Caicos |
| TD | Chad | Tchad |
| TF | French Southern Territories | Terres australes françaises |
| TG | Togo | Togo |
| TH | Thailand | Thaïlande |
| TJ | Tajikistan | Tadjikistan |
| TK | Tokelau | Tokelau |
| TL | Timor-Leste | Timor-Leste |
| TM | Turkmenistan | Turkménistan |
| TN | Tunisia | Tunisie |
| TO | Tonga | Tonga |
| TR | Turkey | Turquie |
| TT | Trinidad and Tobago | Trinité-et-Tobago |
| TV | Tuvalu | Tuvalu |
| TW | Taiwan | Taïwan |
| TZ | Tanzania | Tanzanie |
| UA | Ukraine | Ukraine |
| UG | Uganda | Ouganda |
| UM | United States Minor Outlying Islands | Îles mineures éloignées des États-Unis |
| US | United States | États-Unis |
| UY | Uruguay | Uruguay |
| UZ | Uzbekistan | Ouzbékistan |
| VA | Vatican | Vatican |
| VC | Saint Vincent and the Grenadines | Saint-Vincent-et-les-Grenadines |
| VE | Venezuela | Venezuela |
| VG | Virgin Islands (British) | Îles Vierges britanniques |
| VI | Virgin Islands (U.S.) | Îles Vierges américaines |
| VN | Vietnam | Vietnam |
| VU | Vanuatu | Vanuatu |
| WF | Wallis and Futuna Islands | Îles Wallis-et-Futuna |
| WS | Samoa | Samoa |
| YE | Yemen | Yémen |
| YT | Mayotte | Mayotte |
| ZA | South Africa | Afrique du Sud |
| ZM | Zambia | Zambie |
| ZW | Zimbabwe | Zimbabwe |

Test Transactions

For test purpose use the following value

Normal Transaction

CC Number: 4000000000000000

CVV: 789

EXP: 0818

To test Filter Response:

| | |
|--|--|
| Blocked Credit Card: CC Number: 4200000000000000 CVV: 111 EXP: 0818 | Blocked Name CC Number: 4100000000000000 CVV: 222 EXP: 0818 Jane Doe |
| Blocked IP: CC Number: 4300000000000000 CVV: 222 EXP: 0818 IP: 201.201.8.8 | Blocked Country by BIN: (Brazil country) CC Number: 4001700 00000000 CVV: 444 EXP: 0818 |